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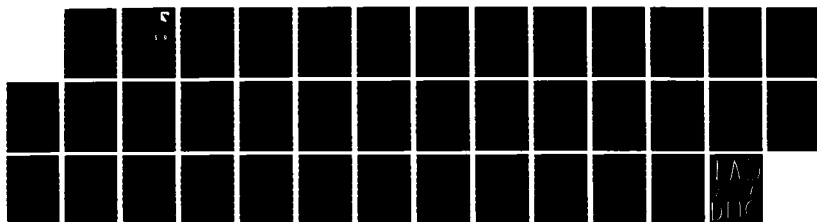
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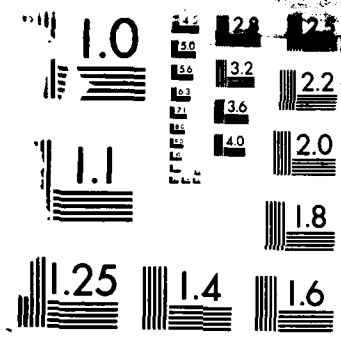
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**BIONICS AND BIOCYBERNETICS BIBLIOGRAPHY, BIODYNAMICS AND
BIOENGINEERING DIVISION 1959-1980**

COMPILED AND EDITED BY
RICHARD J. ZEMBER

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FOR THE COMMANDER



HENNING E. VON GIERKE, Dr Ing
Director
Biodynamics and Bioengineering Division
Armstrong Aerospace Medical Research Laboratory

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FOREWORD

This bibliography lists publications issued by the Biodynamics and Bioengineering Division (formerly Biodynamics and Bionics Division) of the Harry G. Armstrong Aerospace Medical Research Laboratory (AAMRL) which fall under the broad topic, "Bionics and Biocybernetics". The word "Bionics", which was coined in AAMRL in 1960, characterizes the study of living prototypes or life-like systems with the goal of applying techniques similar to those used by living systems to solve technological problems and to develop expanded technological capabilities. The purpose of the Bionics program was to focus the modest basic and exploratory research efforts started jointly by this laboratory of the Aerospace Medical Division and by the Avionics Laboratory of the Wright Air Development Division.

The term "Bionics" was rapidly picked up by the technical and lay community all over the world to characterize technology based on living prototypes.

The area of Bionics is extremely broad. It encompasses neurophysiology, sophisticated information processing, pattern recognition, cognition, artificial intelligence, robotics, etc, and can draw knowledge from and add knowledge to almost every technological field. Therefore, the effort became too diffused in the late nineteen seventies to keep it under one roof, and it is now continued by the individual disciplines and organizations which feel primarily responsible for the advancement of specific technologies.

Although the Biodynamic and Bioengineering Division of AAMRL continues research in selected areas such as automatic speech recognition, speech synthesis and autonomous robotics, the full spectrum of Bionics work was discontinued on the biological side in our laboratory as well as on the hardware side in the Avionics Laboratory. This bibliography lists the publications of the AAMRL biological bionics period (1959-1979) which were not included in the more general Division bibliography summarizing all publications related to biodynamics (Effects of Acceleration, Vibration, Impact, Windblast, Escape and Noise), published as AAMRL-TR-85-031 in April, 1985.

Appreciation is extended to the many personnel of the Division for their contributions to the format and contents of this report. Special acknowledgement is given to Dr. Henning E. Von Gierke, Division Director, for his encouragement and professional guidance, and to Dr. Thomas J. Moore for his technical review. Also to Mr. David L. Brungart and Charlene Cross of the Laboratory's Technical Integration Division, who provided comprehensive computer programming and production assistance.



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- M-1 F.L. Royer, "The Formation of Concepts with Non-Verbal Auditory Stimuli", American Journal of Psychology, Vol. 72, No. 1, March 1959
- M-2 R.W. Peters, "Multidimensional Scaling Approach to the Determination of Basic Psychological Parameters for Pure Tones", WADC Technical Report 59-201, April 1959
- M-3 L. Stark, "Transfer Function of a Biological Photoreceptor", WADC Technical Report 59-311, August 1959
- M-4 R.W. Peters, "Research on Psychological Parameters of Sound", WADD Technical Report 60-249, February 1960
- M-5 N.A. Coulter, Jr, J.C. West, "Nonlinear Passive Mechanical Properties of Skeletal Muscle", WADD Technical Report 60-636, August 1960, (AD 249396)
- M-6 Staff AMRL, "Bionics Symposium", WADD Technical Report 60-600, September 1960, (AD 252300)
- M-7 A. Rapoport, W.J. Horvath, "Information Processing in Neurons and Small Nets", WADD Technical Report 60-652, December 1960, (AD 252897)
- M-8 A. Rapoport, W.J. Horvath, "The Theoretical Channel Capacity of a Single Neuron as Determined by Various Coding Systems", Information and Control, Vol. 3, pp 335-350, December 1960
- M-9 W.S. McCulloch, "Symbolic Representation of the Neuron as an Unreliable Function", Principles of Self Organization, Pergamon Press, London, pp 91-94, 1961
- M-10 L.E. Lipetz, "Bionics", Science, Vol. 133, pp 588-593, February 1961
- M-11 L.E. Lipetz, "A Mechanism of Light Adaptation", Science, Vol. 133, pp 639-640, March 1961
- M-12 L. Stark, H.T. Hermann, "Transfer Function of a Biological Photoreceptor", Nature, Vol. 191, 1173-1174, September 1961
- M-13 L. Stark, H.T. Hermann, "The Transfer Function of a Photoreceptor Organ", Kybernetik, Band 1, Heft 3, December 1961

Bionics and Biocybernetics

- M-14 W.F. Caldwell, E. Glaesser, J.L. Stewart, **"Design of an Analog Ear"**, Biological Prototypes and Synthetic Systems, Plenum Press, New York, Vol. 1, 1962
- M-15 M.C. Goodall, **"Induction and Logical Types"**, Biological Prototypes and Synthetic Systems, Plenum Press, New York, Vol. 1, pp 381-386, 1962
- M-16 M.C. Goodall, **"A Fundamental Complementary Principle for Inductive Logic"**, Nature, Vol. 194, No. 4832, 1962
- M-17 H.S. Weiss, J.R. Mundie, J.L. Cashin, E.W. Shinabarger, **"The Normal Human Intra-Aural Muscle Reflex in Response to Sound"**, Acta OtoLaryng., Vol. 55, pp 505-515, 1962
- M-18 W.S. McCulloch, M.A. Arbib, J.D. Cowan, **"Neurological Models and Integrative Processes"**, Self-Organizing Systems, Spartan Books, New York, 1962
- M-19 W.S. McCulloch, **"The Imitation of One Form of Life by Another Biomimesis"**, Biological Prototypes and Synthetic Systems, Plenum Press, New York, Vol. 1, pp 393-397, 1962
- M-20 J.L. Stewart, **"A Model for Hearing"**, Biological Prototypes and Synthetic Systems, Plenum Press, New York, Vol. 1, pp 213-221, 1962
- M-21 H. Yilmaz, **"On Color Perception"**, Bulletin of Mathematical Biophysics, Vol. 24, pp 5-29, 1962
- M-22 J.L. Stewart, **"Two New Speech Communication Systems"**, MRL Technical Documentary Report 62-10, March 1962
- M-23 J.L. Stewart, **"Masking and Speech Pre-Emphasis"**, MRL Technical Documentary Report 62-11, March 1962
- M-24 J.L. Stewart, **"A Quantitative Model for Loudness Discrimination"**, MRL Technical Documentary Report 62-12, March 1962
- M-25 R.M. Krause, **"Channels which Transmit Letters of Unequal Duration"**, Information and Control, Vol. 5, pp 13-24, March 1962
- M-26 W.S. McCulloch, **"The Utility of Anastomotic Nets"**, Redundancy Techniques for Computing Systems, Spartan Books, Washington, D.C., April 1962

Bionics and Biocybernetics

- M-27 L.E. Lipetz, "A Neural Mechanism of the Purkinje Shift", American Journal of Optometry and Archives of American Academy of Optometry, Monograph No. 299, pp 1-8, April 1962
- M-28 D.O. Ellis, "Relationship of the Electromyographic Signal to Muscle Activity", MRL Technical Documentary Report 62-52, June 1962
- M-29 P.A. Willis, "Some Communications Characteristics of Nerve", Master Thesis (Electrical Engineering), Polytechnic Institute of Brooklyn, June 1962
- M-30 J.L. Stewart, "A Law for Loudness Discrimination", Science, Vol. 137, pp 618-619, August 1962
- M-31 B. Gluss, "Further Remarks on Line Segment Curve-Fitting Using Dynamic Programming", Communications of the Association for Computing Machinery, Vol. 5, pp 441-443, August 1962
- M-32 B. Gluss, "A Line Segment Curve-Fitting Algorithm Related to Optimal Encoding of Information", Information and Control, Vol. 5, No. 3, September 1962, AFAMRL Technical Report 65-237, (AD 633301)
- M-33 L.O. Hoefft, V.E. Sackschewsky, "A Preliminary Study of the Servo Properties of the Gastrocnemius Muscle of the Cat", AMRL Technical Documentary Report 62-108, November 1962
- M-34 J.E. Steele, "Blueprints From Life", Discovery, December 1962
- M-35 W.R. Ashby, "Systems and Information", IEEE Transactions on Military Electronics, Vol. MIL-7, pp 94-97, 1963
- M-36 L.R. Young, L. Stark, "A Discrete Model for Eye Tracking Movements", IEEE Transactions on Military Electronics, Vol. MIL-7, pp 113-115, 1963
- M-37 T.S. Bryan, "Experiments in Adaptive Pattern Recognition", IEEE Transactions on Military Mechanics, Vol. MIL-7, pp 174-179, 1963
- M-38 W.S. McCulloch, "The Colloquy of Living Things", Bio-Telemetry, Pergamon Press, London, pp 3-11, 1963
- M-39 V.E. Sackschewsky, H.L. Oestreicher, "Pattern Recognition as a Problem in Decision Theory and an Application to Speech Recognition", Institute of Electrical and Electronic Engineers Transactions, PTGMIL, Vol. 7, 1963

Bionics and Biocybernetics

- M-40 J.L. Stewart, **"Limits to Animal Discrimination and Recognition"**, Institute of Electrical and Electronic Engineers Transactions, PTGMIL, Vol. 7, 1963
- M-41 G. Biernson, **"Spectral Scanning as a Mechanism of Color Perception"**, Institute of Electrical and Electronic Engineers Transactions, PTGMIL, Vol. 7, 1963
- M-42 W.S. McCulloch, **"Anastomotic Nets Combating Noise"**, Information Storage and Neural Control, Charles C. Thomas, Springfield, Illinois, 1963
- M-43 J.L. Stewart, **"Quantitative Laws for Sensory Perception"**, Psychological Review, Vol. 70, No. 2, pp 180-192, 1963
- M-44 K. Kornacker, **"Some Properties of the Afferent Pathway in the Frog Corneal Reflex"**, Experimental Neurology, Vol. 7, pp 224-239, 1963
- M-45 S. Winogard, J.D. Cowan, **"Reliable Computation in the Presence of Noise"**, Massachusetts Institute of Technology Press, 1963
- M-46 H.T. Hermann, L. Stark, **"Single Unit Responses in a Primitive Photoreceptor Organ"**, Journal of Neurophysiology, Vol. 26, pp 215-228, 1963
- M-47 M.C. Goodall, **"Realizability of Inductive Logic"**, IEEE Transactions, Vol. MIL-7, pp 168-173, 1963
- M-48 J.H. Trageser, **"Data Optimizing Prior to Recording Via Analog Computer"**, Proceedings IEEE, January 1963
- M-49 C.S. Watson, **"Masking of Tones by Noise for the Cat"**, Journal of the Acoustical Society of America, No. 35, 167-172, February 1963
- M-50 L.M. Butsch, Jr, H.L. Oestreicher, **"Bionics"**, IEEE Transactions, Vol. MIL-7, pp 86-87, April 1963
- M-51 W.F. Caldwell, **"Recognition of Sounds by Cochlear Patterns"**, IEEE Transactions on Military Electronics, Vol. MIL-7, Nos. 2 & 3, April 1963
- M-52 J.R. Mundie, **"The Impedance of the Ear - A Variable Quantity"**, U.S. Army Medical Research Laboratory Report 576, Fort Knox, KY, pp 63-85, May 1963

Bionics and Biocybernetics

- M-53 A. Inselberg, H. Von Foerster, R. Yeh, S.M. Cheng, **"Computation of Invariants on Continuous and Discrete Manifolds"**, AMRL Technical Documentary Report 63-40, May 1963
- M-54 E. Glaesser, W.F. Caldwell, J.L. Stewart, **"An Electronic Analog of the Ear"**, AMRL Technical Documentary Report 63-60, June 1963
- M-55 R.M. Roppel, **"A Study of Near Infrared Emission from the Mammalian Cerebral Cortex"**, AMRL Technical Documentary Report 63-66, June 1963, (AD 417125)
- M-56 C.D. Van Ry, **"An Analog and Digital Auto-Correlation Analysis of a Normal EEG for Varying Analytic Lengths, Thesis for M.S. Degree"**, AF Institute of Technology, WPAFB, Ohio, August 1963
- M-57 A.C. Homans, **"Servo-Analysis of the Leg Muscles of the Rabbit, Thesis for M.S. Degree"**, AF Institute of Technology, WPAFB, Ohio, August 1963
- M-58 H.T. Kozuma, **"A Servo-Analysis of the Acoustical Reflex of the Human Ear, Thesis for M.S. Degree"**, AF Institute of Technology, WPAFB, Ohio, August 1963
- M-59 R.W. Peters, **"Dimension of Quality for the Vowel [ae!]"**, Journal of Speech and Hearing Research, Vol. 6, No. 3, September 1963
- M-60 R.W. Peters, **"Dimensions of Perception for Consonants"**, Journal of the Acoustical Society of America, Vol. 35, No. 12, pp 1985-1989, December 1963
- M-61 J.Y. Lettvin, **"Observations on Color Vision"**, Proceedings of Bionics Symposium, ASD Technical Documentary Report 63-946, pp 20-32, 1964, (AD 435982)
- M-62 L.O. Hoefft, J.R. Mundie, **"Servo-Analysis of the Leg Muscles of the Cat"**, Proceedings of Bionics Symposium, ASD Technical Documentary Report 63-946, 1964, (AD 435982)
- M-63 H. Von Foerster, **"Molecular Bionics"**, Proceedings of Bionics Symposium, ASD Technical Documentary Report 63-946, pp 161-190, 1964, (AD 435982)
- M-64 G. Biernson, **"Physiological Retinal Receptor Models Which Satisfy the Feedback Control Requirements on Visual Adaptation"**, Proceedings of the San Diego Symposium for Biomedical Engineering, 1964

Bionics and Biocybernetics

- M-65 W.L. Kilmer, "On Dynamic Switching in One-Dimensional Logic Networks", Information and Control, Vol. 7, 1964
- M-66 J.Y. Lettvin, W.F. Pickard, W.S. McCulloch, W.H. Pitts, "A Theory of Passive Ion Flux Through Axon Membranes", Nature, Vol. 202, pp 1138-1139, 1964
- M-67 W.S. McCulloch, "Reliable Systems Using Unreliable Units", Disorders of Communication, Waverly Press, Baltimore, MD, 1964
- M-68 P.D. Wall, "Presynaptic Control of Impulses at the First Central Synapse in the Cuneate Pathway", Progress in Brain Research, Elsevier, Amsterdam, 1964
- M-69 J.L. Stewart, "On Models of Reality", IEEE Spectrum, Vol. 1, pp 218-233, 1964
- M-70 H.L. Oestreicher, "Natural Versus Artificial Information Processing Systems. A Quantitative Comparison", Natural and Artificial Logic Processors, Pergamon Press, London, 1964
- M-71 B.F. McCabe, K. Gillingham, "Mechanisms of Motion Sickness in the Cat", Arch. Otolaryn., 79, pp 182-187, February 1964
- M-72 H.T. Hermann, "Stochastic Properties in the Negative Phototropic Behavior of Crayfish", Journal of Experimental Zoology, Vol. 155, No. 3, pp 381-401, April 1964
- M-73 J. Sklansky, "Two-Mode Threshold Learning", May 1964, AFAMRL Technical Report 64-039, (AD 602966)
- M-74 J. Sklansky, "Adaptation Learning, Selfrepair and Feedback" IEEE Spectrum, Vol. 1, pp 172-174, May 1964
- M-75 G.R. Hanna, "Neural Information Processing in the Peripheral Auditory System of the Guinea Pig", Journal of Acoustical Society of America, May 1964, AFAMRL Technical Report 66-087, (AD 649556)
- M-76 S.G. Place, "A Model of the Intra-Aural Reflex, Thesis for M.S. Degree", AF Institute of Technology, WPAFB, Ohio, June 1964
- M-77 L.O. Hoefft, E. Ackerman, A. Anthony, "Measurement of the Displacements and Nonlinearities of the Guinea Pig Tympanum", Journal of the Acoustical Society of America, Vol. 36, No. 10, pp 1836-1844, October 1964, AFAMRL Technical Report 65-020, (AD 611719)

Bionics and Biocybernetics

- M-78 A. Taub, "Local Segmental and Supraspinal Interaction with a Dorso-Lateral Spinal Cutaneous Afferent System", *Experimental Neurology*, Vol. 10, No. 4, October 1964
- M-79 N.A. Coulter, Jr, "On the Structure and Organization of the Nervous System from an Information Processing Point of View, (Neural Coding)", October 1964, AFAMRL Technical Report 64-080, (AD 608284)
- M-80 W.F. Pickard, J.Y. Lettvin, J.W. Moore, M. Takata, "Caesium Ions Do Not Pass the Membrane of the Giant Axon", *Proceedings of the National Academy of Sciences*, Vol. 52, No. 5, pp 1177-1183, November 1964
- M-81 L.O. Hoefft, "A Simple Capacitive Displacement Measuring System", December 1964, AFAMRL Technical Report 64-116, (AD 610286)
- M-82 R.C. Gesteland, J.Y. Lettvin, W.H. Pitts, "Chemical Transmission in the Nose of the Frog", *Journal of Physiology*, Vol. 181, 1965
- M-83 M.A. Arbib, "Hitting and Martingale Characterizations of One-Dimensional Diffusions", *Z. Wahrscheinlichkeitstheorie Verw. Geb.*, Vol. 4, 1965
- M-84 K.R. Kaplan, J. Sklansky, "Analysis of Markov Chain Models of Adaptive Processes", January 1965, AFAMRL Technical Report 65-003, (AD 613075)
- M-85 L.E. Lipetz, "Information Processing in the Frog's Retina", February 1965, AFAMRL Technical Report 65-024, (AD 614249)
- M-86 R.M. Roppel, A.C. Peters, "Study of Fluorescent Emission From the Cat Cerebral Cortex", May 1965, AFAMRL Technical Report 65-088, (AD 622273)
- M-87 M.A. Arbib, M. Blum, "Machine Dependence of Degrees of Difficulty", *Proceedings of the American Mathematics Society*, Vol. 16, No. 3, June 1965
- M-88 R.L. Akin, "Substantiation of the Proposed Cross-Correlation Model of the Human Visual System", Thesis for M.S. Degree, GGC/EE/65-1, AF Institute of Technology, WPAFB, Ohio, June 1965
- M-89 D.L. Ockerman, "Computer Simulation of Visual Data Processing in the Human Brain", Thesis for M.S. Degree, GGC/EE/65-10, AF Institute of Technology, WPAFB, Ohio, June 1965

Bionics and Biocybernetics

- M-90 J.M. Young, "An Investigation of the Behavior of Coupled Networks of Neuromime Devices", Thesis for M.S. Degree, GGC/EE/65-18, AF Institute of Technology, WPAFB, Ohio, June 1965
- M-91 M.T. Ulrich, J.R. Mundie, S. Margen, "Biomechanical Properties of Inner Ear Fluids: Methods of Microchemistry and Fluid Withdrawal", Aerospace Medicine, Vol. 36, No. 7, July 1965, AFAMRL Technical Report 65-177, (AD 638387)
- M-92 L.D. Minard, Sr, "Sound Recognition in a Neural Network", Thesis for M.S. Degree, GE/EE/65-15, AF Institute of Technology, WPAFB, Ohio, August 1965
- M-93 O.M. Davies, "An Analysis of the Response of an Electronic Model of the Cochlea", Thesis for M.S. Degree, AF Institute of Technology, WPAFB, Ohio, August 1965
- M-94 A. Taub, P.O. Bishop, "The Spinocervical Tract: Dorsal Column Linkage, Conduction Velocity, Primary Afferent Spectrum", Experimental Neurology, Vol. 13, No. 1, September 1965
- M-95 P.D. Wall, "Impulses Originating in Region of Dendrites", Journal of Physiology, Vol. 180, October 1965
- M-96 S. Watanabe, "The Loeve-Karhunen Expansion as a Means of Information Compression for Classification of Continuous Signals", October 1965, AFAMRL Technical Report 65-114, (AD 628684)
- M-97 F.A. Webster, O.G. Brazier, "Experimental Studies on Target Detection, Evaluation and Interception by Echolocating Bats", November 1965, AFAMRL Technical Report 65-172, (AD 628055)
- M-98 J.U. Casby, N.A. Normann, "Correlographic Analysis of Afferent and Efferent Activity During the Jerk Reflex", December 1965, AFAMRL Technical Report 65-171, (AD 631487)
- M-99 G. Biernson, A. Snyder, "A Theoretical Model for Color Vision", December 1965, AFAMRL Technical Report 65-193, (AD 628873)
- M-100 J. Sklansky, "Learning Systems for Automatic Control", IEEE Transaction on Automatic Control, Vol. AC-11 No. 1, pp 6-19, January 1966, AFAMRL Technical Report 65-119
- M-101 T.J. Moore, "A Selective Review of the Literature on Tactile Sensitivity: 1940-1965", April 1966, AFAMRL Technical Report 66-050, (AD 638718)

Bionics and Biocybernetics

- M-102 J. Flaughner, "Neuromime Network Simulator", Vol. 1, September 1966, AFAMRL Technical Report 66-101, (AD 650567)
- M-103 J. Flaughner, "Neuromime Network Simulator Appendix II: Neuromime Simulator Output", Vol. II, September 1966, AFAMRL Technical Report 66-101, (AD 650567)
- M-104 R.M. Colomb, "Information Handling Properties of Neuromime Nets", September 1966, AFAMRL Technical Report 66-128, (AD 646441)
- M-105 M. Kabrisky, "Information Theoretic Limitations Imposed on Models of the Human Visual System", Conference Record of the 2nd International Biophysical Conference, Vienna, September 1966
- M-106 M. Takata, W.F. Pickard, J.Y. Lettvin, J.W. Moore, "Ionic Conductance Changes in Lobster Axon Membrane When Lanthanum is Substituted for Calcium", Journal of General Physiology, Vol. 50, No. 2 pp 461-471, November 1966
- M-107 I.H. Sublette, "Recognition of Class Membership by Means of Weak, Statistically Dependent Features", December 1966, AFAMRL Technical Report 66-174, (AD 650492)
- M-108 A. Natapoff, "The Consideration of Evolutionary Conservation Toward a Theory of the Human Brain", Perspectives in Biology and Medicine, Vol. 10, No. 3, pp 445-461, 1967
- M-109 J.R. Mundie, T.J. Moore, "Speech Analysis as the Ear Sees It: Aural Topography", Proceedings of Conference on Speech Communications and Processing, 1967, AFAMRL Technical Report 67-176, (AD 699593)
- M-110 D.E. Parker, J.R. Mundie, "Neural Sensitivity Changes Following Stimulation With Transient Sound Bursts", Journal of Auditory Research, Vol. 7, pp 287-301, 1967, AFAMRL Technical Report 67-191, (AD 712243)
- M-111 E.M. Harth, S.L. Edgar, "Association by Synoptic Facilitation in Highly Damped Neural Nets", Biophysical Journal, Vol. 7, No. 6, PP 689-717, 1967
- M-112 B.G. Wickelgren, "Habituation of Spinal Motoneurons", Journal of Neurophysiology, No. 30, pp 1404-1423, 1967
- M-113 S.D. Carter, R.M. Roppel, "Enhancing Tetrazolium-Based Histochemical Stains by Exposure to Light", Stain Technology, Vol. 42, No. 4, 1967, AFAMRL Technical Report 66-064, (AD 756796)

Bionics and Biocybernetics

- M-114 H.L. Oestreicher, "Information Processing Aspects of Bionics", Lectures in Aerospace Medicine, USAF School of Aerospace Medicine, Brooks AFB, Texas, 1967
- M-115 M. Kabrisky, "Visual Information Processing in the Brain", Proceedings of Symposium on Models for the Perception of Speech and Form, MIT Press, 1967
- M-116 V.V. Griffith, G.H. Bolen, "Distributed Adaptation in Neuromime Networks", January 1967, AFAMRL Technical Report 66-225, (AD 652853)
- M-117 W.S. McCulloch, "Cybernetic Problems of Learning, Conditioning of Control, of Command, and of Expediency", Conditional Reflex, Vol. 2, No. 1, January 1967
- M-118 J.L. Stewart, "Speech Processing With a Cochlear-Neural Analog", February 1967, AFAMRL Technical Report 66-229, (AD 653207)
- M-119 K. Krohn, R. Mateosian, J. Rhodes, "Methods of the Algebraic Theory of Machines. I. Decomposition Theorem for Generalized Machines", Journal of Computer and System Sciences, Academic Press, NY, Vol. 1, No. 1, April 1967
- M-120 M. Blum, "A Machine-Independent Theory of the Complexity of Recursive Functions", Journal of the Association for Computing Machinery, Vol. 14, No. 2, pp 322-336, April 1967
- M-121 R.G. Runge, S.S. Viglione, M. Uemura, "A Model of the Avian Retina", May 1967, AFAMRL Technical Report 67-060, (AD 655907)
- M-122 W.F. Pickard, "Interpretation of Microelectrode Recordings From the Dorsal Roots of Cat", Experimental Neurology, Vol. 18, No. 3, pp 369-382, July 1967
- M-123 R.W. Peters, "Perceptual Organization for Speech and Other Auditory Signals", July 1967, AFAMRL Technical Report 68-031, (AD 675183)
- M-124 V.V. Griffith, W.E. Wuerthele, G.H. Bolen, "Further Studies on Distributed Adaptation in Neuromime Networks", August 1967, AFAMRL Technical Report 67-121, (AD 660848)
- M-125 R.A. Gruenke, "Information Processing in Small Syncoder Networks", September 1967, AFAMRL Technical Report 67-104, (AD 667809)

Bionics and Biocybernetics

- M-126 D.E. Parker, J.R. Mundie, "Transient Response Pattern From the Auditory Cortex of the Guinea Pig", October 1967, AFAMRL Technical Report 67-112, (AD 667569)
- M-127 K. Abend, "Compound Decision Procedures for Pattern Classification", December 1967, AFAMRL Technical Report 67-010, (AD 667570)
- M-128 E.R. Lewis, "Models of Neuroelectric Interactions", December 1967, AFAMRL Technical Report 67-132, (AD 669574)
- M-129 A. Rapoport, W.J. Horvath, R.B. Small, S.S. Fox, "The Mammalian Central Nervous System as a Network", December 1967, AFAMRL Technical Report 67-187, (AD 670193)
- M-130 H.L. Oestreicher, "Natural and Artificial Auditory Information Processing", Kybernetik, 1968, Proceedings of International Cybernetics Congress, Oldenbourg, Munich, pp 363-382, 1968, AFAMRL Technical Report 68-029, (AD 759320)
- M-131 H.E. Von Gierke, "Bionics and Bioengineering in Aerospace Technology", Proceedings of the AGARD Bionics Symposium, Brussels, Belgium, 1968, AFAMRL Technical Report 68-184
- M-132 H.L. Oestreicher, "Pattern Recognition", Proceedings of the AGARD Bionics Symposium, Brussels, Belgium, 1968, AFAMRL Technical Report 68-185
- M-133 J.R. Mundie, "Neurophysiological Principles of Auditory Information Processing", Proceedings of the AGARD Bionics Symposium, Brussels, Belgium, 1968, AFAMRL Technical Report 68-186, (AD 740483)
- M-134 H.E. Von Gierke, "Discussion of Paper: 'On Biocybernetics of the Vestibular System' by L.R. Young", Proc. of International Symposium on the Biocybernetics of the Central Nervous System, Washington, DC, Little, Brown and Co., 1968
- M-135 H.E. Von Gierke, "Discussion of Paper: 'Mechanisms of Speech Recognition' by H.L. Oestreicher", Proc. of International Symposium on the Biocybernetics of the Central Nervous System, Washington, DC, Little, Brown and Co., 1968
- M-136 H.L. Oestreicher, "Discussion of Paper: 'Some Aspects of the Physiological Study of Speech' by L.A. Chistovich and V.A. Kozhevnikov", Proc. of International Symposium on the Biocybernetics of the Central Nervous System, Washington, DC, Little, Brown and Co., 1968

Bionics and Biocybernetics

- M-137 H.L. Oestreicher, D.R. Moore, **"Cybernetic Problems in Bionics"**, Gordon and Breach Science Publishers, Inc., New York and London, 1968
- M-138 R.L. Barron, **"Self-Organizing and Learning Control Systems"**, Cybernetic Problems in Bionics, Bionics Symposium 1966, Gordon and Breach Publishers, Inc., NY, pp 147-203, 1968
- M-139 V. Braitenberg, **"On the Neural Optics Behind the Eye of the Fly"**, Cybernetic Problems in Bionics, Bionics Symposium 1966, Gordon and Breach Publishers, Inc., NY, pp 323-335, 1968
- M-140 R.C. Gesteland, J.Y. Lettvin, W.H. Pitts, S.H. Chung, **"A Code in the Nose"**, Cybernetic Problems in Bionics, Bionics Symposium 1966, Gordon and Breach Publishers, Inc., NY, pp 313-322, 1968
- M-141 E.R. Caianiello, **"A Study of Neural Networks and Reverberations"**, Cybernetic Problems in Bionics, Bionics Symposium 1966, Gordon and Breach Publishers, Inc., NY, pp 421-430, 1968
- M-142 M.W. Cannon, **"Mathematical Model of the Encoding Functions of the Eighth Nerve Neuron"**, Cybernetic Problems in Bionics, Bionics Symposium 1966, Gordon and Breach Publishers, Inc., NY, pp 513-530, 1968
- M-143 E.M. Harth, **"Time Dependencies In Memory"**, Cybernetic Problems in Bionics, Bionics Symposium 1966, Gordon and Breach Publishers, Inc., NY, pp 617-631, 1968
- M-144 S. Watanabe, **"A Method of Self-Featuring Information Compression in Pattern Recognition"**, Cybernetic Problems in Bionics, Bionics Symposium 1966, Gordon and Breach Publishers, Inc. NY, pp 697-707, 1968
- M-145 E.R. Lewis, **"Synchronization in Small Groups of Neurons: A Study With Electronic Models"**, Cybernetic Problems in Bionics, Bionics Symposium 1966, Gordon and Breach Publishers, Inc. NY, pp 777-789, 1968
- M-146 R.G. Runge, M. Uemura, S.S. Viglione, **"Electronic Synthesis of the Neural Network in the Pigeon Retina"**, Cybernetic Problems in Bionics, Bionics Symposium 1966, Gordon and Breach Publishers, Inc. NY, pp 791-810, 1968

Bionics and Biocybernetics

- M-147 L.L. Sutro, "Proposed Electronics to Represent the Properties of a Frog's Eye", *Cybernetic Problems in Bionics*, Bionics Symposium 1966, Gordon and Breach Publishers, Inc., NY, pp 811-819, 1968
- M-148 S.H. Chung, "Neurophysiology of the Visual Systems", *Recognizing Patterns*, M.I.T. Press, pp 82-101, 1968
- M-149 T.J. Harley, Jr, L.N. Kanal, N.C. Randall, "System Considerations for Automatic Imagery Screening", *Pictorial Pattern Recognition*, Thompson Book Co., pp 15-31, 1968
- M-150 W.L. Kilmer, W.S. McCulloch, J. Blum, "An Embodiment of Some Vertebrate Command and Control Principles", *Currents in Modern Biology*, North-Holland Publishing Co., Amsterdam, No. 2, pp 81-87, 1968
- M-151 W.L. Kilmer, W.S. McCulloch, J. Blum, "Some Mechanisms for a Theory on the Reticular Formation", *Systems Theory and Biology*, Proceedings of the III Systems Symposium at Case Institute of Technology, pp 286-375, 1968
- M-152 J.A. Kirsch, "A Proposed Model of the Lobster Cardiac Ganglion", Thesis for M.S. Degree, GE/EE/68-10, AF Institute of Technology, WPAFB, Ohio, 1968
- M-153 F.A. Webster, O.G. Brazier, "Experimental Studies of Echolocation Mechanisms in Bats", May 1968, AFAMRL Technical Report 67-192, (AD 673373)
- M-154 R.A. Gruenke, J.R. Mundie, "Design and Operation of Root C, A Small Syncoder Network Simulator", May 1968, AFAMRL Technical Report 67-236, (AD 672976)
- M-155 M.W. Cannon, "A Method of Analysis and Recognition for Voiced Vowels", *IEEE Transactions on Audio and Electroacoustics*, Vol. AU-16, No. 2, pp 154-158, June 1968, AFAMRL Technical Report 67-185, (AD 708119)
- M-156 J.L. Stewart, "Analog Simulation Studies in Echolocation", July 1968, AFAMRL Technical Report 68-040, (AD 675180)
- M-157 R.A. Wilson, G.H. Bolen, "Research on Distributed Adaptation in Control Systems", August 1968, AFAMRL Technical Report 68-054, (AD 678071)

Bionics and Biocybernetics

- M-158 J.E. Steele, "The Symptomatology of Motion Sickness", NASA SP-187, pp 89-96, September 1968, AFAMRL Technical Report 70-086, (AD 755343)
- M-159 T.J. Moore, "Sensitization in the Auditory and Tactile Systems Following Exposure to Low and Moderately Intense Stimulation", Journal of Acoustical Society of America, Vol. 44, No. 5, pp 1390-1400, November 1968, AFAMRL Technical Report 68-098, (AD 708130)
- M-160 H.E. Von Gierke, "Bionics - Its Role and Future in Support of Astronautics", Proceedings of Fourth International Symposium on Bioastronautics and the Exploration of Space, November 1968, AFAMRL Technical Report 68-153, (AD 730831)
- M-161 M.C. Ziskin, "Mathematical Derivation of the Interspike Interval Histogram From the Spike Occurrence Histogram of Neuronal Spike Data", December 1968, AFAMRL Technical Report 68-038, (AD 687083)
- M-162 E.E. Brueschke, "Design of a 30-Channel Multiplexed Quasi Three-Dimensional Display", December 1968, AFAMRL Technical Report 68-154, (AD 686740)
- M-163 H.E. Von Gierke, "The Mechanical Behavior of Biological Systems", Future Goals of Engineering in Biology and Medicine, Academic Press, J.F. Dickson & J.H. Brown, Ed, 1969, AFAMRL Technical Report 67-207, (AD 758963)
- M-164 R.C. Bean, "Discrete Conductance Fluctuations in Lipid Bilayer-Protein Membrane", Journal of General Physiology, Vol. 53, No. 6, pp 741-757, 1969, AFAMRL Technical Report 69-004, (AD 738709)
- M-165 R.C. Bean, H. Chan, "Thermal Transitions on Conductivity of Ultrathin Membranes", The Molecular Basis of Membrane Function, D. C. Testeson, Editor, Prestice-Hall, Inc., N.Y., 1969, AFAMRL Technical Report 69-005, (AD 738756)
- M-166 H.L. Oestreicher, "Source Analysis in Pattern Recognition", Methodologies of Pattern Recognition, S. Watanabe, Editor, Academic Press, New York/London, pp 555-556, 1969
- M-167 L.N. Kanal, B. Chandrasekaran, "Recognition, Machine 'Recognition' and Statistical Approaches", Methodologies of Pattern Recognition, S. Watanabe, Editor, Academic Press, New York/London, 1969

Bionics and Biocybernetics

- M-168 J.R. Mundie, "Neural Calculus", Biocybernetics of the Central Nervous System, L. D. Proctor, Editor, Little, Brown and Co., Chapter 14, 1969, AFAMRL Technical Report 68-078
- M-169 H.L. Oestreicher, "Mechanisms of Speech Recognition", Biocybernetics of the Central Nervous System, L. D. Proctor, Editor, Little, Brown and Co., Chapter 6, pp 127-144, 1969
- M-170 B. Chandrasekaran, D.W.C. Shen, "Stochastic Automata Games", IEEE Transactions on Systems Science and Cybernetics, Vol. 5, pp 145-149, April 1969
- M-171 B. Chandrasekaran, "Internal Average Sampling", IEEE Transactions on Communication Technology, Vol. COM-17, No. 2, pp 331-332, April 1969, AFAMRL Technical Report 68-138, (AD 771254)
- M-172 J.R. Mundie, G.E. Heller, "New Perspectives in Electronic Information Processing Suggested From Observations of Living Systems", Proceedings of National Aviation Electronics Conference, May 1969
- M-173 K. Abend, T.J. Harley, Jr, "On the Mean Accuracy of Statistical Pattern Recognizers", IEEE Transactions on Information Theory, Vol. IT-15, No. 3, pp 420-423, May 1969, AFAMRL Technical Report 68-142, (AD 770688)
- M-174 E.M. Harth, B. Beek, T.J. Csermely, R.D. Lindsay, "Compound Net Model of the Cerebral Cortex", June 1969, AFAMRL Technical Report 68-189, (AD 692719)
- M-175 O.H. Tallman, II, "The Classification of Visual Images by Spatial Filtering", Thesis for Ph.D, AF Institute of Technology, WPAFB, Ohio, CFSTI AD 858866, June 1969
- M-176 F.A. Webster, O.G. Brazier, "Echolocation Investigations on Bats and Humans: Target Localization and Evaluation", September 1969, AFAMRL Technical Report 68-155, (AD 697071)
- M-177 J.L. Stewart, J.M. Kasson, "Simulating Mechanisms in Animal Echolocation", September 1969, AFAMRL Technical Report 68-194, (AD 697411)
- M-178 J.W. Carl, "Generalized Harmonic Analysis for Pattern Recognition: A Biologically Derived Model", Thesis for M.S. Degree, AF Institute of Technology, WPAFB, Ohio, CFSTI AD 862441, September 1969

Bionics and Biocybernetics

- M-179 L.N. Kanal, T.J. Harley, Jr, "The Complexity of Patterns and Pattern Recognition Systems", November 1969, AFAMRL Technical Report 69-062, (AD 700150)
- M-180 E.M. Harth, T.J. Csermely, B. Beek, R.D. Lindsay, "Brain Functions and Neural Dynamics", Journal of Theoretical Biology, No. 26, pp 93-120, 1970, AFAMRL Technical Report 70-055, (AD 728300)
- M-181 P.A. Anninos, B. Beek, T.J. Csermely, E.M. Harth, "Dynamics of Neural Structures", Journal of Theoretical Biology, No. 26, pp 121-148, 1970, AFAMRL Technical Report 70-056, (AD 728276)
- M-182 J.A. Freeman, "Responses of Cat Cerebellar Purkinje Cells to Convergent Inputs From Cerebral Cortex and Peripheral Sensory Systems", Journal of Neurophysiology, Vol. 33, No. 6, pp 697-712, 1970, AFAMRL Technical Report 71-008, (AD 722989)
- M-183 C.R. Cavonius, R.M. Chapman, "Wavelength Sensitivity of Retinal Ganglion Cells in the Cat", February 1970, AFAMRL Technical Report 69-055, (AD 705650)
- M-184 T.J. Moore, J.R. Welch, Jr, "Forward and Backward Enhancement of Sensitivity in the Auditory System", Journal of the Acoustical Society of America, 47, No. 2 (Part 2), pp 534-539, February 1970, AFAMRL Technical Report 69-106, (AD 711453)
- M-185 L.O. Gilstrap, Jr, "Large Neurotron Networks", March 1970, AFAMRL Technical Report 69-092, (AD 706855)
- M-186 J.W. Carl, "An Application of Walsh Functions to Image Classification", Proceedings of the Symposium and Workshop on the Application of Walsh Functions, NRL, Washington, DC, pp 147-151, April 1970
- M-187 J.W. Carl, "A Biologically Derived Model for Image Classification Utilizing Walsh Functions", Proceedings of the 22nd National Aerospace Electronics Conference (NAECON), Dayton, Ohio, pp 253-259, May 1970
- M-188 R.A. Gill, "The Scaling Problem in the Classification of Images by Spatial Filtering", Thesis for M.S. Degree, GA/BE/70-1, AF Institute of Technology, WPAFB, Ohio, June 1970
- M-189 D.L. Thorne, "Application of Spatial Filtering to Speech Recognition", Thesis for M.S. Degree, GE/BE/70S-5, AF Institute of Technology, WPAFB, Ohio, June 1970

Bionics and Biocybernetics

- M-190 R.L. Barron, G.C. Veith, Jr, **"Self-Organizing Control System Demonstrator"**, July 1970, AFAMRL Technical Report 69-089, (AD 712099)
- M-191 J.M. Idelsohn, **"A Pattern Recognition Device With Adaptive Pre-processing and Classification"**, September 1970, AFAMRL Technical Report 70-052, (AD 714576)
- M-192 L.O. Gilstrap, Jr, **"Studies in Neuromime Network Completeness, Connectivity and Goals"**, October 1970, AFAMRL Technical Report 70-065, (AD 716411)
- M-193 O.H. Tallman, II, **"Processing of Visual Imagery by an Adaptive Model of the Visual System: Its Performance and Its Significance"**, November 1970, AFAMRL Technical Report 70-045, (AD 717157)
- M-194 D.J. Lim, **"Morphology and Function of the Interdental Cell"**, Journal of Laryngology and Otology, Vol. LXXIV, No. 12, 1241-1256, December 1970, AFAMRL Technical Report 70-146, (AD 738712)
- M-195 J.R. Mundie, A.J. Goldstein, **"A Challenge to the Concept That the Auditory System Functions as a Frequency Analyzer"**, Journal of the Acoustical Society of America, Vol. 50, pp 109-110, 1971, AFAMRL Technical Report 71-072, (AD 766433)
- M-196 R.C. Bean, **"Protein-Mediated Mechanisms of Variable Ion Conductance in Thin Lipid Membranes"**, Chapter in Membranes: A Series of Advances, Vol. 3, 1971, AFAMRL Technical Report 71-094, (AD 764829)
- M-197 M. Kabrisky, J.W. Carl, **"Sequency Filtered Densely Connected Transforms for Pattern Recognition"**, Proceedings of the 4th International Conference on Systems Science, pp 223-228, January 1971, AFAMRL Technical Report 70-123, (AD 761306)
- M-198 A.J. Goldstein, J.R. Mundie, **"Rupture of the Tympanic Membrane Followed by Sudden Death"**, Arch. Otolaryng., Vol. 93, February 1971, AFAMRL Technical Report 70-062, (AD 724488)
- M-199 B. Chandrasekaran, T.J. Harley, Jr, **"Finite Memory Hypothesis Testing: Achieving Performance Bound Without Randomization"**, February 1971, AFAMRL Technical Report 70-082, (AD 721212)
- M-200 T.J. Harley, Jr, K.G. Salter, B. Chandrasekaran, **"Variable Length Vector Pattern Recognition"**, February 1971, AFAMRL Technical Report 70-083, (AD 722063)

Bionics and Biocybernetics

- M-201 R.C. Gesteland, "Chemical Mechanisms and Neural Coding in Vertebrate Chemosensors", February 1971, AFAMRL Technical Report 70-117, (AD 721466)
- M-202 M.C. Ziskin, J.R. Mundie, "Encoding Function of Syncoders", March 1971, AFAMRL Technical Report 70-119, (AD 724072)
- M-203 D.K. Mathur, E.G. Henrichon, Jr, "Mathematics of Syncoders", March 1971, AFAMRL Technical Report 70-135, (AD 727067)
- M-204 R.C. Bean, "Formation and Utilization of Stable Lipid Membranes with multiple Resistance States", April 1971, AFAMRL Technical Report 70-108, (AD 725783)
- M-205 J.C. Fischer, A.J. Goldstein, "Middle Ear Insufflation Producing Subarachnoid Hemorrhage and EKG Changes", Arch. Otolaryng., Vol. 93, May 1971, AFAMRL Technical Report 70-063, (AD 728519)
- M-206 D.J. Lim, "Vestibular Sensory Organs, A Scanning Electron Microscopic Investigation", Arch. Otolaryng., Vol. 94, pp 69-76, July 1971, AFAMRL Technical Report 70-046, (AD 738729)
- M-207 L.N. Kanal, "Generative, Descriptive, Heuristic, and Formal Modeling in Pattern Analysis and Classification", July 1971, AFAMRL Technical Report 70-131, (AD 730285)
- M-208 D.O. Robbins, C.R. Cavanaugh, R.M. Chapman, "The Effect of Wavelength on the Organization of the Reptilian Visual System", July 1971, AFAMRL Technical Report 70-140, (AD 730286)
- M-209 T.J. Moore, J.R. Mundie, "Specification of the Minimum Number of Glottal Pulses Necessary for Reliable Identification of Selected Speech Sounds", August 1971, AFAMRL Technical Report 70-109, (AD 731147)
- M-210 R.C. Bean, "Research on Two - State Membranes", September 1971, AFAMRL Technical Report 69-095, (AD 732226)
- M-211 D.J. Lim, W. Melnick, "Acoustic Damage of the Cochlea, A Scanning and Transmission Electron Microscopic Observation", Arch. Otolaryng., Vol. 94, pp 294-305, October 1971, AFAMRL Technical Report 71-046, (AD 739288)
- M-212 R.C. Bean, "Multiple Conductance States in Single Channels of Variable Resistance Lipid Bilayer Membranes", Journal of Membrane Biology, Vol. 7, pp 15-28, 1972, AFAMRL Technical Report 70-105, (AD 741618)

Bionics and Biocybernetics

- M-213 T.J. Moore, J.R. Mundie, "Measurement of Specific Mechanical Impedence of the Skin: Effects of Static Force, Site of Stimulation, Area of Probe", Journal of the Acoustical Society of America, 52, No. 2 (Part 2) pp 577-584, 1972, AFAMRL Technical Report 71-091, (AD 748720)
- M-214 R.C. Bean, "Formation and Utilization of Stable Lipid Membranes with Multiple Resistance States, Properties of Lipid Bilayers", February 1972, AFAMRL Technical Report 71-110, (AD 741922)
- M-215 A.J. Goldstein, J.R. Mundie, "Response of the Primary Auditory Neuron to Human Speech", Journal of the Acoustical Society of America, Vol. 52, No. 140, July 1972, AFAMRL Technical Report 71-073, (AD 770763)
- M-216 J.W. Carl, C.F. Hall, "The Application of Filtered Transforms to the General Classification Problem", IEEE Transactions on Computers, Vol. C-21, No. 7, pp 785-790, July 1972, AFAMRL Technical Report 72-022, (AD 748161)
- M-217 D.J. Lim, "Fine Morphology of the Tectorial Membrane, Its Relationship to the Organ of Corti", Archives of Otolaryngology, Vol. 96, pp 199-215, September 1972, AFAMRL Technical Report 71-111, (AD 772409)
- M-218 J.L. Gehrich, J.L. Cashin, "Techniques in the Acquisition of Data From Single Auditory Nerves in the Guinea Pig", December 1972, AFAMRL Technical Report 72-035, (AD 754934)
- M-219 D.M. Levy, "A Review of the Theory of Embedding Fields and Its Application to Neural Networks", December 1972, AFAMRL Technical Report 72-036
- M-220 R.E. Rink, "Information Theory of Neural Noise in Hearing", Mathematical Biosciences, No. 16, pp 129-142, 1973, AFAMRL Technical Report 68-137, (AD 760372)
- M-221 R.L. Barron, R.A. Gagnon, "Application of Self-Organizing Control to Remote Piloting of Vehicles", Remotely Manned Systems, Exploration and Operation in Space, E. Heer, Ed., N. Hollywood Printing Co., pp 409-422. LOC No. 73-77824, 1973, AFAMRL Technical Report 72-070, (AD 770953)
- M-222 H.E. Von Gierke, "Man to Model or Model to Man?", Proceedings of XXI International Congress of Aviation and Space Medicine, Munich, West Germany, 1973, AFAMRL Technical Report 73-096, (AD 771670)

Bionics and Biocybernetics

- M-223 H.E. Krause, H.L. Oestreicher, H.L. Vogt, H.T. Mohlman, **"Minimization Methods in the Development of Biodynamic Models"**, Proceedings of XXI International Congress of Aviation and Space Medicine, Munich, West Germany, 1973, AFAMRL Technical Report 73-086, (AD 770992)
- M-224 J.C. Rock, **"Recursive Plane Analysis: Its Application to the Study of Phase-Looking in Non-Uniform Signal-Dependent Sampling Tech."**, January 1973, AFAMRL Technical Report 72-034, (AD 756918)
- M-225 R.C. Bean, **"Formation and Utilization of Stable Lipid Membranes with Multiple Resistance States, Gating Processes in Stabilized LM"**, February 1973, AFAMRL Technical Report 72-082, (AD 759264)
- M-226 A.J. Goldstein, **"Permeability of the Organ of Corti"**, Annals of Otology, Rhinology and Laryngology, Vol. 82, No. 2, March 1973, AFAMRL Technical Report 71-070, (AD 760373)
- M-227 J.W. Carl, R.V. Swartwood, **"A Hybrid Walsh Transform Computer"**, IEEE Transactions on Computers, Vol. C-22, No. 7, pp 669-672, July 1973, AFAMRL Technical Report 72-031, (AD 770762)
- M-228 A.N. Mucciardi, **"The Mucciardi - Gose Clustering Algorithm and Its Applications in Automatic Pattern Recognition"**, July 1973, AFAMRL Technical Report 73-031, (AD 767273)
- M-229 C.S. Lessard, R.A. Balusek, H.M. Hughes, **"Development of a Period Analysis Computer Program"**, October 1973, AFAMRL Technical Report 73-074, (AD 773808)
- M-230 Y.K. Liu, G. Ray, **"A Finite Element Analysis of Wave Propagation in Human Spine"**, November 1973, AFAMRL Technical Report 73-040, (AD 773858)
- M-231 J.K. Hawkins, **"Simple Electrochemical Circuits for Large Scale Real-Time Information Processing"**, December 1973, AFAMRL Technical Report 73-041, (AD 773855)
- M-232 L.L. Sutro, W.L. Kilmer, **"Development of a Decision-Making and Learning Network Based Upon a Model of the Reticular Formation"**, December 1973, AFAMRL Technical Report 73-061, (AD 776056)

Bionics and Biocybernetics

- M-233 D. Cleveland, R.L. Barron, L.O. Gilstrap, Jr, "RPV/Self-Organizing Control Demonstration System: Vol. I-SOC Equation Development, Logic Configurations and Control Mode", December 1973, AFAMRL Technical Report 73-066, (AD 773860)
- M-234 A.N. Mucciardi, E.C. Orr, E.R. Johnson, R.L. Barron, "Investigation of the Theoretical Foundations of Self-Organizing and Learning Systems", December 1973, AFAMRL Technical Report 73-076, (AD 776065)
- M-235 J.R. Mundie, J.C. Rock, A.J. Goldstein, "Signal Processing Principles Revealed by an Auditory System Model", Cybernetics and Bionics, W. D. Keidel, W. Handler, M. Spreng, Editors, R. Oldenbourg Verlag, Munich, pp 292-307, 1974, AFAMRL Technical Report 73-028, (AD A027803)
- M-236 H.L. Oestreicher, "On the Structure of Intelligent Systems", Cybernetics and Bionics, (Keidel, Handler, Spreng, Editors), Oldenbourg Muenchen Wien, pp 232-249, 1974, AFAMRL Technical Report 73-015, (AD A005921)
- M-237 H.E. Von Gierke, "Biomechanics: Body Motions Under External Forces and Internal Control", Cybernetics and Bionics, (Keidel, Handler, Spreng Editors), R. Oldenburg Muenchen Wien, 1974, AFAMRL Technical Report 73-023
- M-238 D. Cleveland, R.L. Barron, M.R. Derrick, "RPV/Self-Organizing Control Demonstration System: Vol. II-Hardware Description, System Oper. & Maint., & RPV Simulation", February 1974, AFAMRL Technical Report 73-067, (AD 781080)
- M-239 D. Cleveland, R.L. Barron, M.R. Derrick, "Computer Simulation of RPV Flight Characteristics", March 1974, AFAMRL Technical Report 73-119, (AD 781079)
- M-240 M.W. Cannon, J.W. Carl, "TERCOM Performance: Analysis and Simulation", June 1974, AFAMRL Technical Report 73-130, (AD 783804)
- M-241 A.J. Pantle, "Visual Information Processing of Complex Imagery", July 1974, AFAMRL Technical Report 74-043, (AD 785366)
- M-242 T.J. Moore, "Frequency Discrimination as a Function of the Number of Periods of the Signal Presented", August 1974, AFAMRL Technical Report 74-062, (AD 786457)

Bionics and Biocybernetics

- M-243 J.J. Godfrey, "Auditory Speech Features: The Sounds of English as Processed by a Model of the Ear", September 1974, AFAMRL Technical Report 74-041, (AD A002604)
- M-244 T.J. Moore, J.L. Cashin, "Response Patterns of Cochlear Nucleus Neurons to Excerpts From Sustained Vowels", Journal of the Acoustical Society of America, Vol. 56, No. 5, pp 1565-1576, November 1974, AFAMRL Technical Report 74-063, (AD A006957)
- M-245 E.R. Johnson, A.N. Mucciardi, "Search Techniques for Self-Organizing Systems", July 1975, AFAMRL Technical Report 75-012, (AD A014815)
- M-246 D.G. Leet, J.L. Cashin, "Signal Processing in the Auditory Nervous System: A Bionic Systems Approach", September 1975, AFAMRL Technical Report 75-076, (AD A029044)
- M-247 A.J. Pantle, "Research on the Recognition and Analysis of Complex and Dynamic Imagery", October 1975, AFAMRL Technical Report 75-061, (AD A018074)
- M-248 Z.S. Bond, "Perception of Anticipatory Coarticulation for Selected Speech Consonants", Communication to the Editor of the Journal of Phonetics, 1976, AFAMRL Technical Report 76-077
- M-249 R.W. Steer, J.C. Rock, J.R. Mundie, D. Osborne, "Design of an Active CoC Filter for Audio Frequency Signal Processing", January 1976, AFAMRL Technical Report 75-078, (AD A022903)
- M-250 R.A. Gagnon, "An Automatic Cluster Analysis Algorithm", February 1976, AFAMRL Technical Report 75-059, (AD A022898)
- M-251 R.A. Gagnon, "An Algorithm for the Analysis of Reconnaissance Imagery", March 1976, AFAMRL Technical Report 75-060, (AD A025964)
- M-252 M.R. Derrick, "Controllers and Autopilot Models for RPV Simulation Program", April 1976, AFAMRL Technical Report 74-090, (AD A025792)
- M-253 D.J. Lim, "Morphological and Physiological Correlates in Cochlear and Vestibular Sensory Epithelia", Proceedings of the International Symposium on Scanning Electron Microscopy, Toronto, Canada, April 1976, AFAMRL Technical Report 76-014, (AD A028134)
- M-254 Z.S. Bond, "Speech Recognition System Test: Identification of Vowels Excerpted From Oral and Nasal Contexts", Journal of the Acoustical Society of America, Vol. 59, No. 5, May 1976, AFAMRL Technical Report 75-001, (AD A022900)

Bionics and Biocybernetics

- M-255 R.A. Gagnon, "The Efficient Display of Electro-Optical Imagery", Proceedings of NAECON 76, Dayton, Ohio, pp 878-881, May 1976, AFAMRL Technical Report 76-021, (AD A031091)
- M-256 D.B. Warmuth, J.R. Mundie, G.L. Vaughn, "Voice Communication by Speech Synthesis", Proceedings of NAECON 76, Dayton, Ohio, pp 933-937, May 1976, AFAMRL Technical Report 76-028, (AD A031090)
- M-257 T.J. Moore, J.L. Cashin, "Response of Cochlear Nucleus Neurons to Synthetic Speech", Journal of the Acoustical Society of America, Vol. 59, No. 6, pp 1443-1449, June 1976, AFAMRL Technical Report 75-070, (AD A027928)
- M-258 G.C. Stockman, L.N. Kanal, "Interactive Screening of Reconnaissance Imagery", June 1976, AFAMRL Technical Report 76-015, (AD A028969)
- M-259 M.W. Cannon, "RPV Operator Performance with Various Flight Control Systems During a Simulated Target Approach", June 1976, AFAMRL Technical Report 76-033, (AD A029004)
- M-260 Z.S. Bond, "Identification of Vowels Excerpted From /i/ and /r/ Contexts", Journal of the Acoustical Society of America, Vol. 60, No. 4, pp 906-910, October 1976, AFAMRL Technical Report 75-105, (AD A032784)
- M-261 D.G. Leet, "A Primary Auditory Nerve Model", October 1976, AFAMRL Technical Report 76-084, (AD A036222)
- M-262 T.J. Moore, J.L. Cashin, "Response Patterns of 'Primary-Like' Cochlear Nucleus Neurons to Excerpts From Sustained Vowels", March 1977, AFAMRL Technical Report 77-010, (AD A040473)
- M-263 T.C. Hartrum, R.A. Burckle, "The Stochastic Syncoder as a Neuron Model", Proceedings of NAECON 77, Dayton, Ohio, pp 251-258, May 1977, AFAMRL Technical Report 77-018, (AD A037510)
- M-264 M.W. Cannon, "A Spatial Frequency Analysis Model for Predicting Human Performance at Visual Pattern Matching Tasks", Proceedings of IEEE Systems, Man and Cybernetics Society Conference, Washington, DC, September 1977, AFAMRL Technical Report 77-043, (AD A041649)
- M-265 A.J. Pantle, "Research on Visual Perception of Complex and Dynamic Imagery", November 1977, AFAMRL Technical Report 77-083, (AD A049127)

Bionics and Biocybernetics

- M-266 H.L. Oestreicher, "Information Process in Intelligent Systems", Proceedings of the International Congress on Cybernetics and Society, Tokyo, 1978
- M-267 H.E. Von Gierke, "Is Man Predictable? Biological Models in Aviation Medicine and Technology", Deutsche Forschungs und Versuchsanstalt Fuer Luftund Raumfahrt, Cologne, Germany, DFVLR-Nachrichten, 26, November 1978
- M-268 H.E. Von Gierke, E.H. Graul, A. Habermehl, "Space-biomedicine, Biocybernetics, Bionics and Anthropotechnology", Medical Concepts of the 1980's, X. Medicinale, Iserlahn (medici Press), 1980
- M-269 R.A. Gagnon, "A Predictor of Human Visual Performance (PREVIP) at Form Discrimination Tasks", December 1980, AFAMRL Technical Report 80-001

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